

Exhibit 2

Infringement Claim Chart for U.S. Pat. No. US8510076B2 v. Cisco Systems Inc. ("Defendant")

Claim1	Evidence
<p>1a. A sensor module for use in a sensor network, the sensor module comprising at least one sensor,</p>	<p>The defendant's product Cisco Industrial Asset Vision (IAV), a simple, all-in-one, cloud-managed sensor IoT solution to monitor assets. It uses LoRaWAN wireless Cisco industrial sensors responsible for detecting and collecting data from the environment. These sensors are designed to measure various physical properties such as temperature, humidity, pressure, light, motion, etc.</p>  <p>Source: https://www.cisco.com/c/en/us/products/cloud-systems-management/industrial-asset-vision/index.html</p> <p><u>Industrial Asset Vision</u></p> <p><u>Cisco Industrial Asset Vision (IAV) is a full solution to monitor assets and facilities using Cisco ruggedized sensors. It uses LoRaWAN wireless Cisco industrial sensors to provide simple and powerful visibility into your business-critical environments to keep your assets up and running efficiently—even in the harshest environments. Once Industrial Asset Vision is enabled within the IoT Operations Dashboard, operations teams and IT support staff can have a single view across Cisco industrial sensors and network connectivity. More product and licensing information on Cisco Industrial Asset Vision can be found here.</u></p> <p>Source: https://developer.cisco.com/docs/iotod/#!welcome/industrial-asset-vision</p>

Make your organization better, safer, and more efficient by monitoring assets and facilities using Cisco Industrial Asset Vision, a simple, all-in-one, cloud-managed sensor IoT solution.

Source: <https://www.cisco.com/c/en/us/products/collateral/cloud-systems-management/industrial-asset-vision/datasheet-c78-744368.pdf>

Cisco sensors

Cisco Industrial Asset Vision includes a family of industrial sensors that provide telemetry and location information for assets and facilities. They are preintegrated with the Cisco Wireless Gateway for LoRaWAN (IXM) and management dashboard. Most have IP65 and IP67 ratings, allowing them to be deployed in outdoor and industrial indoor environments. Deploy one or many to monitor a wide variety of conditions, including, humidity, leak detection, room temperature, machine temperature, product temperature, ingress and egress, lighting, occupancy, vibration and asset location. All sensors which support battery powering come with batteries and are easy to install.

Source: <https://www.cisco.com/c/en/us/products/collateral/cloud-systems-management/industrial-asset-vision/datasheet-c78-744368.pdf>



Figure 1.
Cisco Industrial Asset Vision components

Source: <https://www.cisco.com/c/en/us/products/collateral/cloud-systems-management/industrial-asset-vision/datasheet-c78-744368.pdf>

Platform Support

Table 2. Platform Support

Product family	Platforms supported
LoRaWAN gateway	Cisco IXM 900 MHz Cisco IXM 800 MHz
LoRaWAN sensors	AV200, AV201, AV202, AV203 AV204, AV205, AV206, AV207 AV250, AV251, AV300, AV400
Cloud application	Cisco IOT Operations Dashboard
Mobile Application	Apple IOS, Android

Source: <https://www.cisco.com/c/en/us/products/collateral/cloud-systems-management/industrial-asset-vision/datasheet-c78-744368.pdf>

Monitoring assets and facilities using sensors helps businesses **become better, safer, and more resilient**. Data such as temperature, humidity, and ingress/egress all impact the status of a facility or an asset, whether it is a motor, a refrigeration unit, or even the networking gear itself. Remote monitoring helps to:

- Improve employee safety and efficiency by preventing unnecessary site visits and reducing employee movement throughout facilities
- Reduce expenses by avoiding premature equipment failure
- Improve customer satisfaction by reducing unplanned network outages and operational downtime

Source: <https://www.cisco.com/c/en/us/products/collateral/cloud-systems-management/industrial-asset-vision/datasheet-c78-744368.pdf>

	<p>Cisco® Industrial Asset Vision helps to improve safety, business resiliency, and operational efficiencies by monitoring assets and facilities using sensors. It is a simple all-in-one, cloud-managed solution. Industrial Asset Vision has everything you need, from sensors to the gateways to the cloud-managed operations dashboard – integrated, secure, and ready to go.</p> <p>Source: https://www.cisco.com/c/en/us/products/collateral/cloud-systems-management/industrial-asset-vision/datasheet-c78-744368.pdf</p>
<p>1b. a locator for determining the location of the at least one sensor,</p>	<p>The defendant's product Cisco Industrial Asset Vision (IAV) includes a locator for determining the geographical or spatial location of at least one sensor that is achieved through technologies like GPS (Global Positioning System), triangulation, or other localization techniques.</p> <p>Add Geofences</p> <p>Use geofences to track the location of GPS-enabled sensors and associated assets in relation to an area on a map. This allows you to create a virtual perimeter for your real-world geographic area, and receive information as sensors and associated assets enter or leave that area. Geofences can be defined using GPS-enabled sensors that are associated with assets. You can view which assets and sensors lie within the geofences that are enabled. Alerts can be generated based on geofence events.</p> <p>The map where the Geofences are shown can be viewed in the default or the satellite mode.</p> <p>Source: https://developer.cisco.com/docs/iotod/#!/add-geofences/add-geofences</p> <p>11. AV300: Outdoor GPS Sensor</p> <p>Solution overview</p> <p>The AV300 sensor is a LoRaWAN asset tracking sensor which utilizes GPS for determining location. The sensor can be mounted on non-powered assets exposed to rain, dust, and marine conditions, where long battery life is required. The device has built-in antennas for GPS reception and for LoRaWAN communication, a 3D accelerometer, a high-performance GPS that can track both GPS and GLONASS satellites simultaneously, and flash memory for storing non-volatile information. The device also integrates with the dashboard geofence feature for location defined alerting.</p>

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Industrial Asset Vision

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Cisco sensors

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1c. a
transceiver
for
communicatin
g with other
sensor
modules and/
or a base

The defendant's product Cisco Industrial Asset Vision (IAV) includes transceiver (combination of a transmitter and a receiver). It allows the sensor module to communicate with other sensor modules within the network or with a central base station. This communication enables the exchange of data, control commands, and coordination among different modules.

station and

SEA Plus provides further flexibility by enabling users to configure any type of equipment that supports IP connectivity. With SEA Plus, a direct, secure data connection is created between client software on the user's computer and the remote asset, enabling the user to easily interact with and exchange files with the asset. SEA Plus supports TCP, UDP, and ICMP based protocols. IoT Operations Dashboard and SEA Plus allow the operations administrator to choose a protocol, e.g., TCP or UDP, and a port for secure communications. The feature provides users with the advanced ability to define specific channels for communications between a user and the remote system and block everything outside that.

Source: <https://developer.cisco.com/docs/iotod/#!welcome/secure-equipment-access>



Source: <https://www.cisco.com/c/en/us/products/collateral/cloud-systems-management/industrial-asset-vision/datasheet-c78-744368.pdf>

	<div data-bbox="485 228 1860 461"> <p><u>Cisco sensors</u></p> <p>Cisco Industrial Asset Vision includes a family of industrial sensors that provide telemetry and location information for assets and facilities. They are preintegrated with the Cisco Wireless Gateway for LoRaWAN (IXM) and management dashboard. Most have IP65 and IP67 ratings, allowing them to be deployed in outdoor and industrial indoor environments. Deploy one or many to monitor a wide variety of conditions, including, humidity, leak detection, room temperature, machine temperature, product temperature, ingress and egress, lighting, occupancy, vibration and asset location. All sensors which support battery powering come with batteries and are easy to install.</p> </div> <p>Source: https://www.cisco.com/c/en/us/products/collateral/cloud-systems-management/industrial-asset-vision/datasheet-c78-744368.pdf</p>
<p>1d. a processor wherein the processor is adapted, in use, to communicate with other sensor modules and to determine whether the sensor module should operate in a sensing mode or a controlling mode within the network.</p>	<p>The defendant's product SEWIO UWB Real-Time Location System (RTLS) includes a processor/software responsible for communicating with sensor modules/devices. The processor determines whether the sensor module should operate in a sensing mode or a controlling mode. In sensing mode, it monitors the data collected by the sensor to detect events and in controlling mode, it makes decisions based on that received data to control the overall behavior of the system, triggers certain actions or adjustments based on specific conditions, and transmits information regarding events to a base station.</p> <div data-bbox="554 943 1793 1224"> <p>Monitoring assets and facilities using sensors helps businesses become better, safer, and more resilient. Data such as temperature, humidity, and ingress/egress all impact the status of a facility or an asset, whether it is a motor, a refrigeration unit, or even the networking gear itself. Remote monitoring helps to:</p> <ul style="list-style-type: none"> • Improve employee safety and efficiency by preventing unnecessary site visits and reducing employee movement throughout facilities • Reduce expenses by avoiding premature equipment failure • Improve customer satisfaction by reducing unplanned network outages and operational downtime </div> <div data-bbox="667 1289 1696 1414"> <p>The software (here: RTLS platform tool) monitors the sensor data to detect events and transmits to the server/bases station to control and optimize the system's performance (in controlling</p> </div>

Source: <https://www.cisco.com/c/en/us/products/collateral/cloud-systems-management/industrial-asset-vision/datasheet-c78-744368.pdf>

The software (here: RTLS platform tool) monitors the sensor data to detect events

Add Geofences

Use geofences to track the location of GPS-enabled sensors and associated assets in relation to an area on a map. This allows you to create a virtual perimeter for your real-world geographic area, and receive information as sensors and associated assets enter or leave that area. Geofences can be defined using GPS-enabled sensors that are associated with assets. You can view which assets and sensors lie within the geofences that are enabled. Alerts can be generated based on geofence events.

Source: <https://developer.cisco.com/docs/iotod/#!add-geofences/add-geofences>

11. AV300: Outdoor GPS Sensor

Solution overview

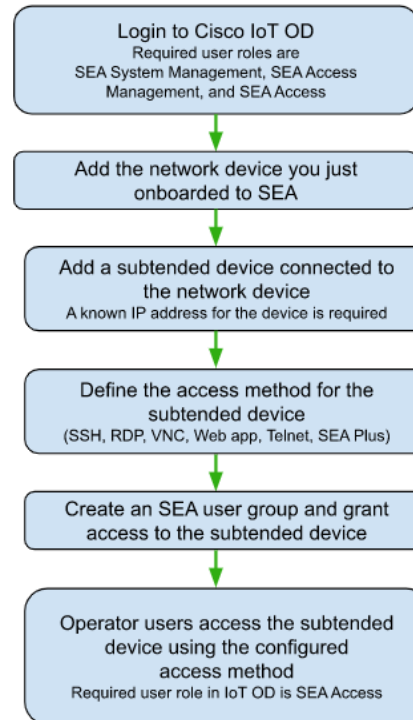
The AV300 sensor is a LoRaWAN asset tracking sensor which utilizes GPS for determining location. The sensor can be mounted on non-powered assets exposed to rain, dust, and marine conditions, where long battery life is required. The device has built-in antennas for GPS reception and for LoRaWAN communication, a 3D accelerometer, a high-performance GPS that can track both GPS and GLONASS satellites simultaneously, and flash memory for storing non-volatile information. The device also integrates with the dashboard geofence feature for location defined alerting.

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Summary steps



Source: <https://developer.cisco.com/docs/iotod/#!onboarding-quick-start-guide-for-ir-devices/summary-steps>

Internal note: A subtended device would can be operated in a sensing mode. TBD if (subtended devices) could operate in both modes (i.e. control mode or sensor mode).